

TABLE M.5.6.1.2–3.—National Ignition Facility Accident Frequency and Consequences (Median Meteorology)

Accident	MEI			Offsite Population ^a		Individual Noninvolved Worker		Noninvolved Worker Population	
	Frequency (per year)	Dose (rem)	LCFs ^b	Dose (person-rem)	LCFs ^c	Dose (rem)	LCFs ^b	Dose (person-rem)	LCFs ^c
Earthquake during No Action Alternative operations	2.0×10^{-8}	4.78×10^{-4}	2.87×10^{-7}	1.96×10^{-1}	1.18×10^{-4}	1.43×10^{-3}	8.60×10^{-7}	2.08×10^{-1}	1.25×10^{-4}
Earthquake during depleted uranium shot	2.0×10^{-9}	9.68×10^{-4}	5.81×10^{-7}	2.40×10^{-1}	1.44×10^{-4}	2.55×10^{-3}	1.53×10^{-6}	3.48×10^{-1}	2.09×10^{-4}
Earthquake during highly enriched uranium shot	2.0×10^{-9}	1.02×10^{-3}	6.09×10^{-7}	2.47×10^{-1}	1.48×10^{-4}	2.64×10^{-3}	1.59×10^{-6}	3.59×10^{-1}	2.16×10^{-4}
Earthquake during thorium shot	2.0×10^{-9}	1.04×10^{-3}	6.24×10^{-7}	2.43×10^{-1}	1.46×10^{-4}	2.65×10^{-3}	1.59×10^{-6}	3.57×10^{-1}	2.14×10^{-4}
Earthquake during tracer shot	2.0×10^{-9}	5.44×10^{-4}	3.26×10^{-7}	2.09×10^{-1}	1.26×10^{-4}	1.63×10^{-3}	9.80×10^{-7}	2.29×10^{-1}	1.38×10^{-4}
Earthquake during plutonium without yield shot	2.0×10^{-9}	1.65×10^{-3}	9.89×10^{-7}	5.46×10^{-1}	3.28×10^{-4}	4.99×10^{-3}	3.00×10^{-6}	7.41×10^{-1}	4.45×10^{-4}
Earthquake during plutonium with yield shot	2.0×10^{-9}	9.01×10^{-4}	5.41×10^{-7}	3.16×10^{-1}	1.90×10^{-4}	2.69×10^{-3}	1.62×10^{-6}	3.96×10^{-1}	2.38×10^{-4}

Source: LLNL 2003d.

^aBased on the population of approximately 6,900,000 persons residing within 50 miles of LLNL.^bIncreased likelihood of a latent cancer fatality.^cIncreased number of latent cancer fatalities.

LCFs = latent cancer fatalities; MEI = maximally exposed individual.